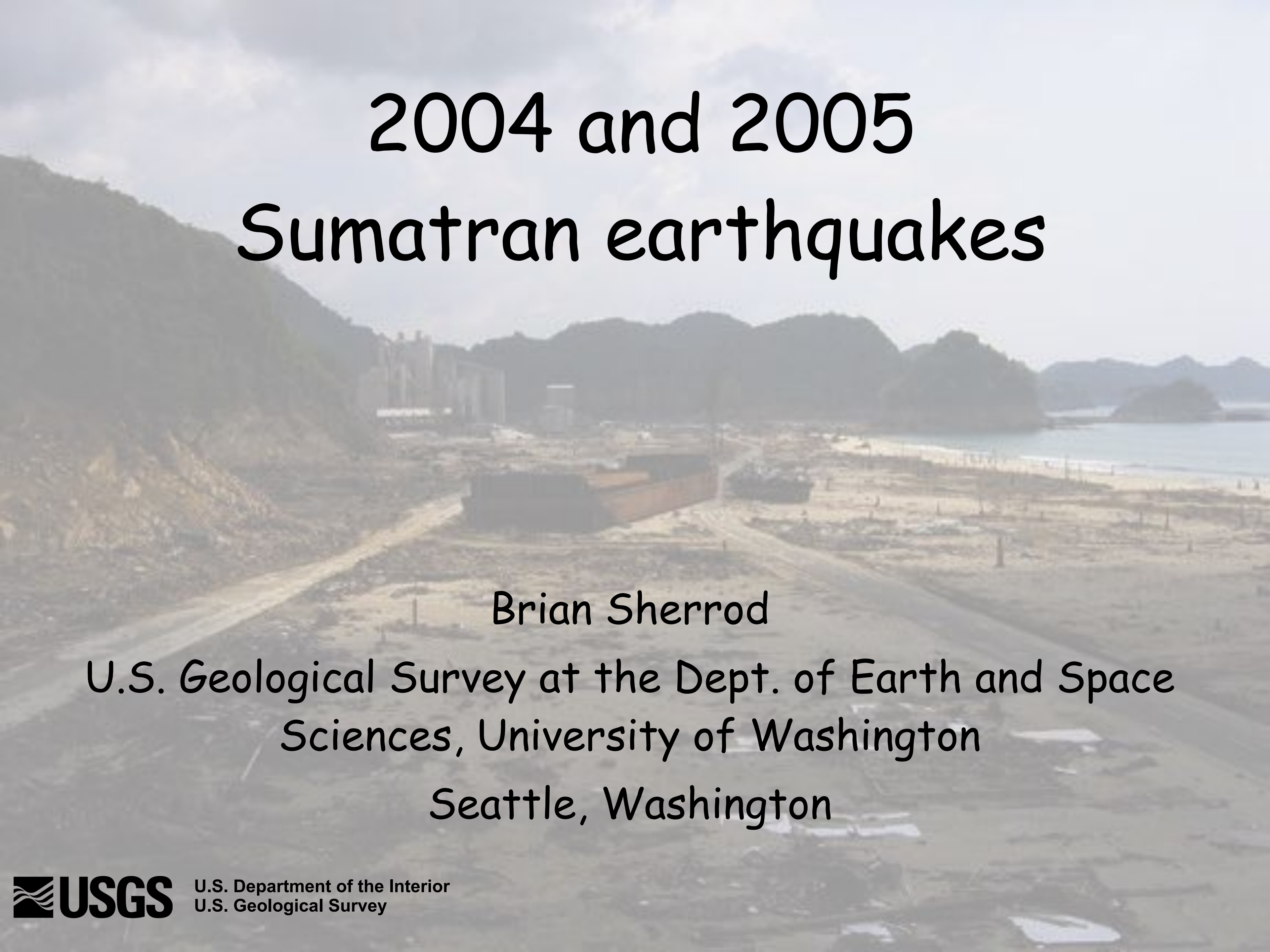
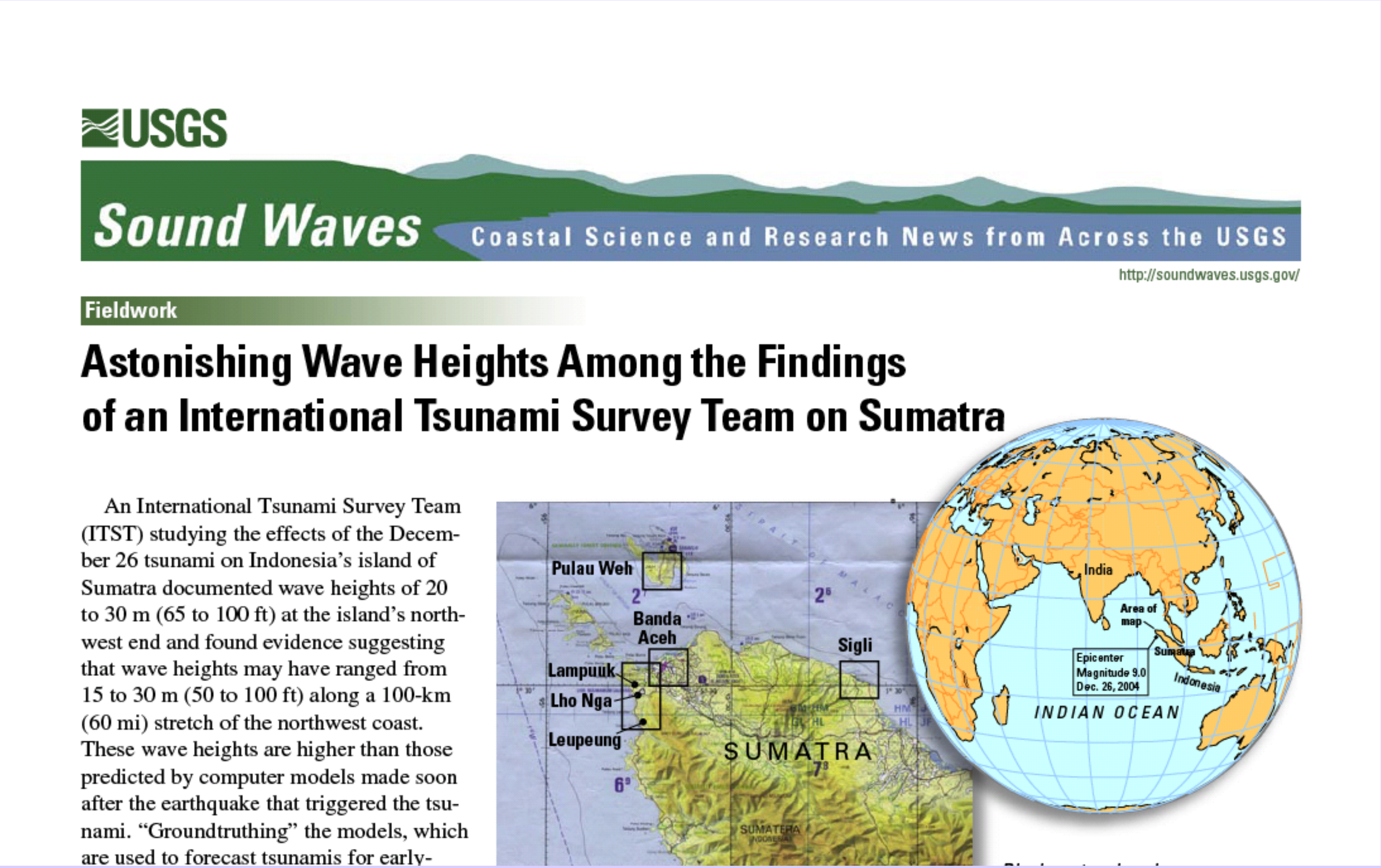


2004 and 2005 Sumatran earthquakes

Brian Sherrod
U.S. Geological Survey at the Dept. of Earth and Space Sciences, University of Washington
Seattle, Washington

USGS
U.S. Department of the Interior
U.S. Geological Survey



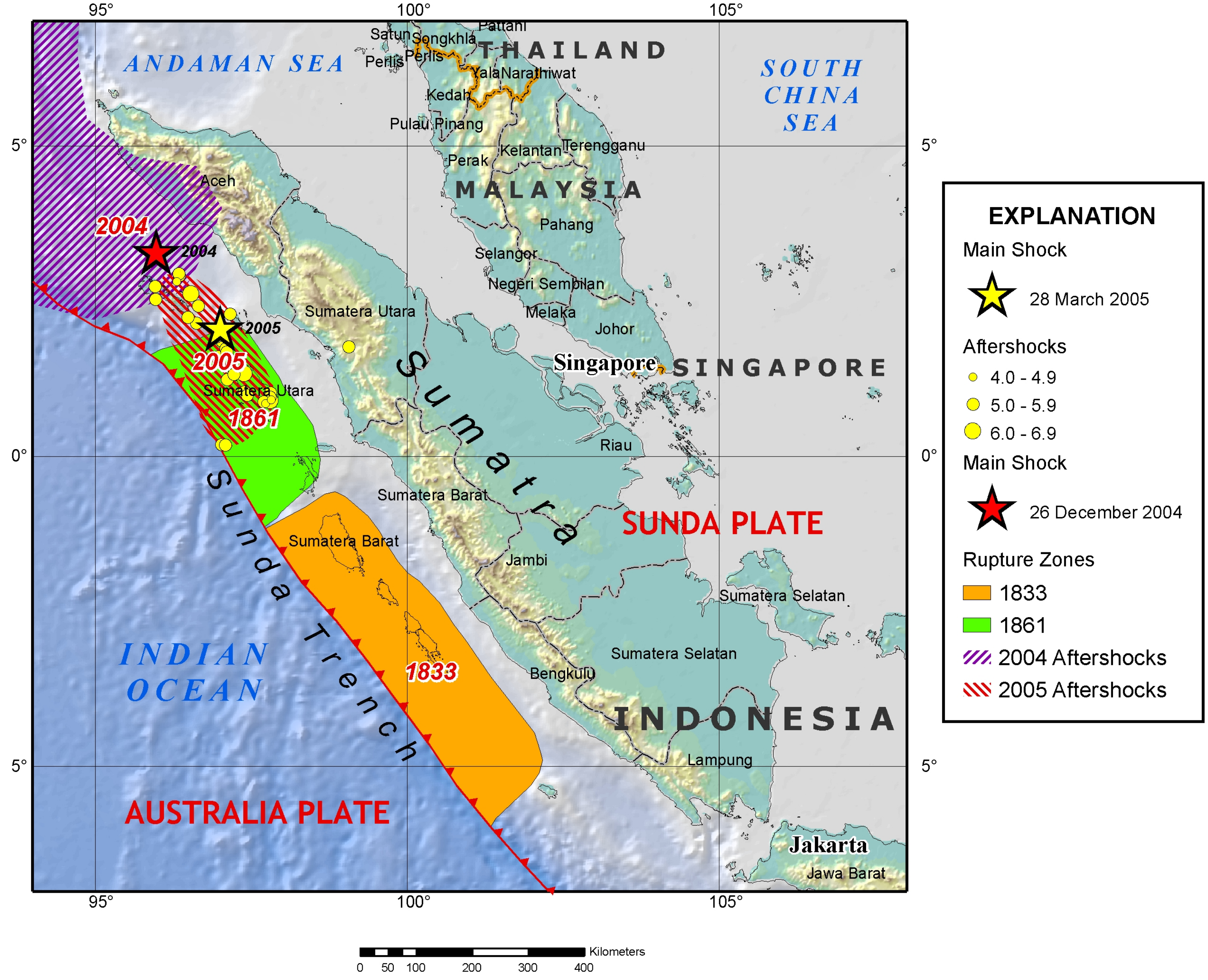
USGS
Sound Waves
Coastal Science and Research News from Across the USGS
http://soundwaves.usgs.gov/

Fieldwork

Astonishing Wave Heights Among the Findings of an International Tsunami Survey Team on Sumatra

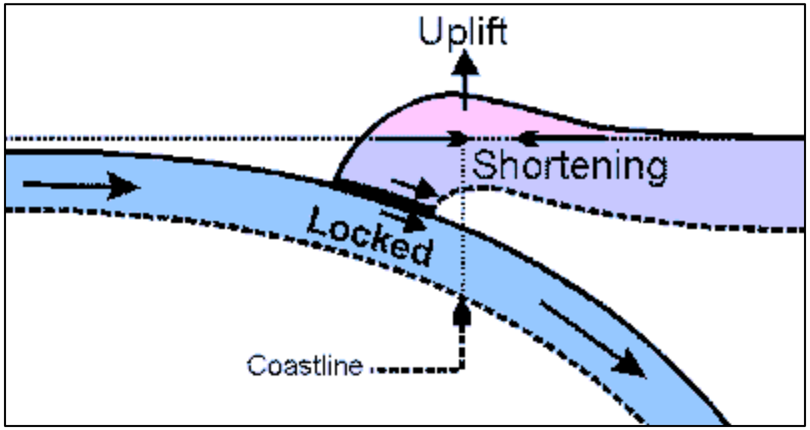
An International Tsunami Survey Team (ITST) studying the effects of the December 26 tsunami on Indonesia's island of Sumatra documented wave heights of 20 to 30 m (65 to 100 ft) at the island's northwest end and found evidence suggesting that wave heights may have ranged from 15 to 30 m (50 to 100 ft) along a 100-km (60 mi) stretch of the northwest coast. These wave heights are higher than those predicted by computer models made soon after the earthquake that triggered the tsunami. "Groundtruthing" the models, which are used to forecast tsunamis for early-

Northern Sumatra Earthquake of 28 March 2005

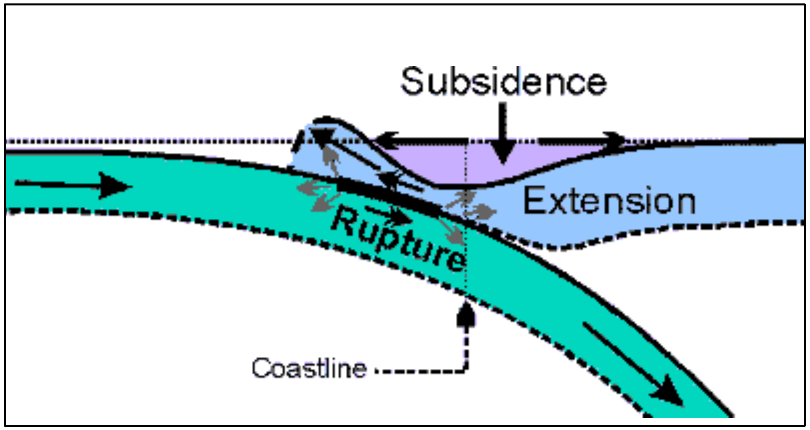


31 March 2005 @ 0900 MST

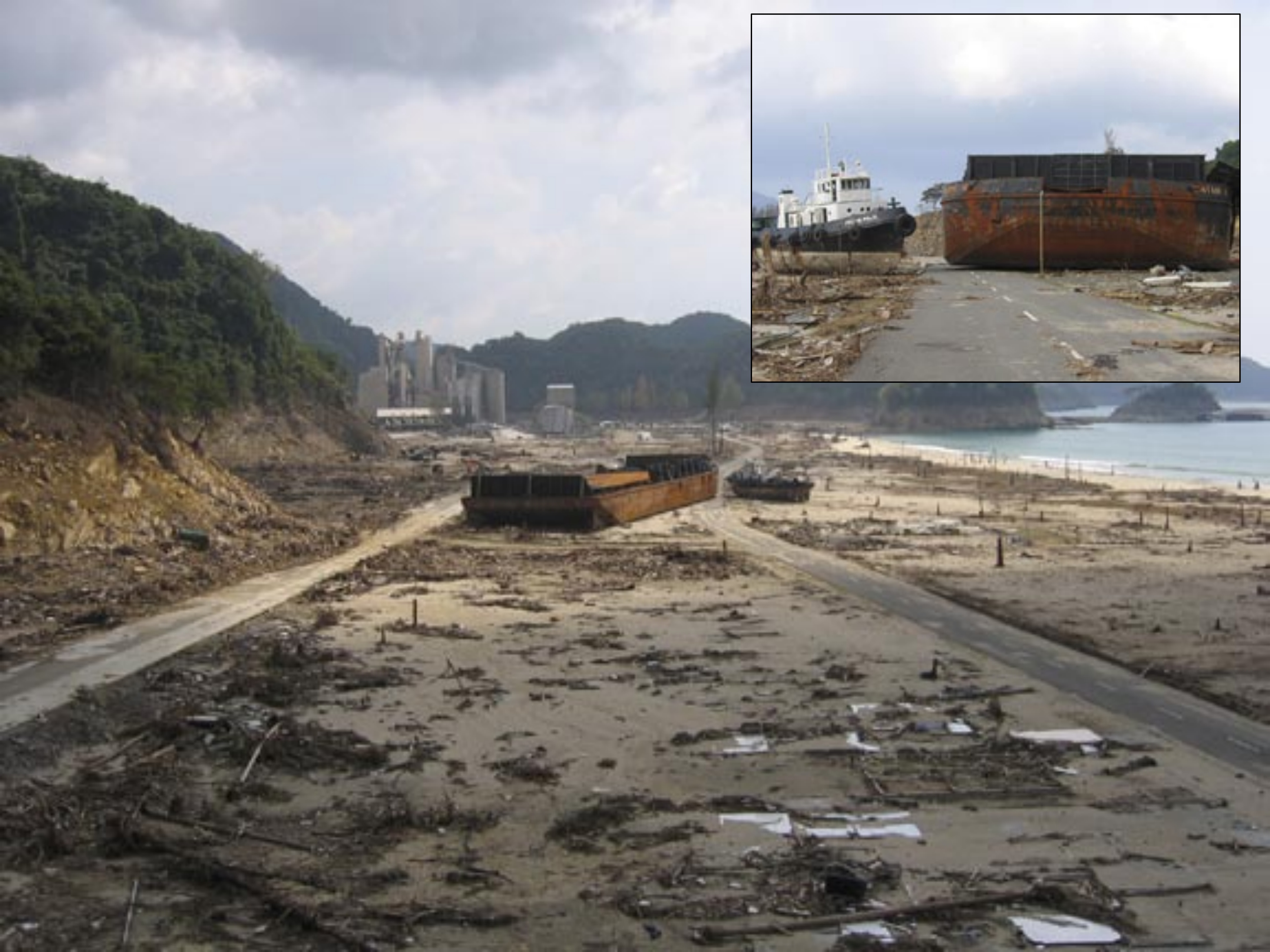
Stress Animations

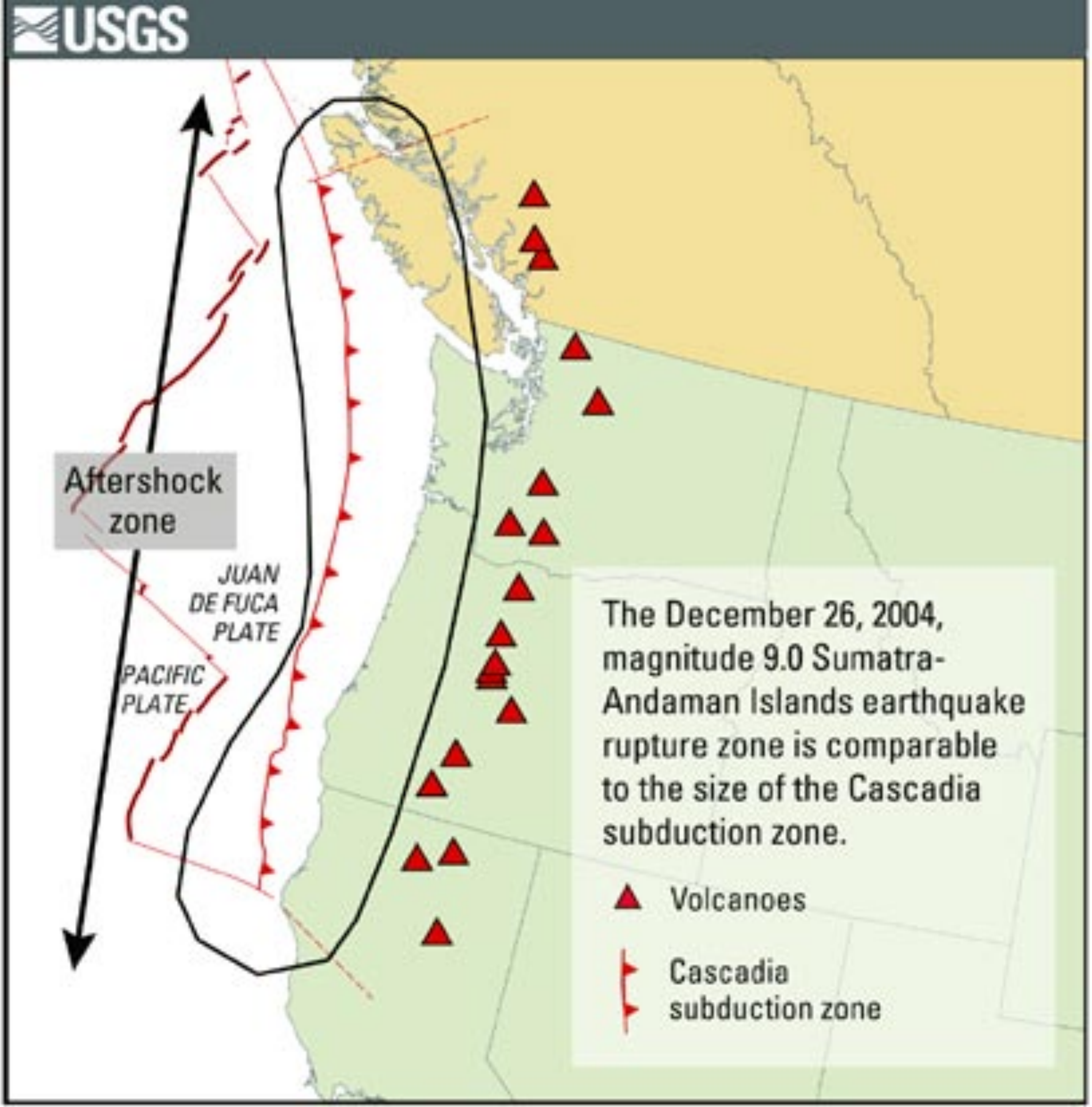


Interseismic



Coseismic





The December 26, 2004, magnitude 9.0 Sumatra-Andaman Islands earthquake rupture zone is comparable to the size of the Cascadia subduction zone.

Can it happen here?